

**SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR
DEMODULATING QUADRATURE AMPLITUDE MODULATED
SIGNALS**

5

ABSTRACT OF THE DISCLOSURE

A system, method and computer program product are provided. The system includes a demapping element, and may also include a master controller. The demapping element is capable of estimating an amplitude of a signal constellation of a QAM signal. In this regard, the signal includes a pilot channel and a supplemental channel, where the 10 supplemental channel includes traffic of a user and at least one other user. The demapping element is capable of estimating the amplitude based upon a power of a signal combination of a traffic symbol and a pilot symbol. The system can also include a master controller in electrical communication with the demapping element. The master controller can then be capable of demodulating the traffic of the user in the supplemental 15 channel of the QAM signal based upon the estimate of the amplitude.